

WIND POWERED TURBINE IN A TUNNEL

ABSTRACT OF THE DISCLOSURE

A wind powered turbine has a conduit. A middle conduit portion is located between inlet and outlet conduit portions, having a main inlet and outlet of the conduit, respectively. A rotor having a shaft with blades extending therefrom is located in the middle conduit portion. The blades are located completely within the middle conduit portion. Preferably, a splitter is located in the inlet conduit portion to provide upper and lower sub-tunnels that both feed into the middle conduit portion. Upper and lower interior walls of the middle conduit portion have substantially circular plane shapes that are substantially centered at the rotational axis of the shaft. Upper and lower clearance gaps are located between the blades and the upper and lower interior walls, respectively. The main outlet is preferably higher than the main inlet. Preferably, a generator is located on each side of the conduit and rotatably coupled to the shaft.